

## **Description**

Mi-Wave's 550 Series Frequency Meters are available in three standard waveguide sizes for operation from 50 to 220 GHz frequency range.

Each unit is supplied with a calibration table and curve. The calibration is performed by using the micrometer-driven plunger to measure the distance

- High Frequency Operation from 50.0 to 220 GHz
- Circular Waveguide Cavity for High-Q Resonances
- Micrometer Readout for Accurate Frequency Determination

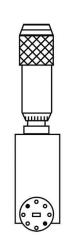
between electrical resonances for a known frequency. These distances are recorded for several frequencies and the plotted on a curve to allow extrapolation for all frequencies.

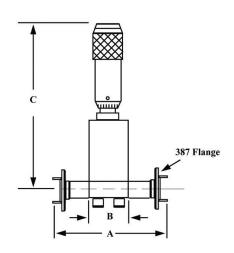
## **Applications**

The 550 Series Frequency Meters are reaction-type cavity wavemeters designed for the accurate determination of millimeter wave signal frequencies.



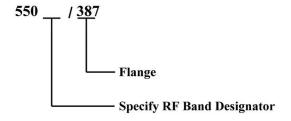
| Dimensional Specifications |      |      |     |      |      |      |  |
|----------------------------|------|------|-----|------|------|------|--|
| Model No.                  | A    |      | В   |      | С    |      |  |
|                            | in.  | mm   | in. | mm   | in.  | mm   |  |
| 550F                       | 1.20 | 30.5 | .50 | 12.7 | 2.50 | 63.5 |  |
| 550D                       | 1.20 | 30.5 | .50 | 12.7 | 2.50 | 63.5 |  |
| 550G                       | 1.20 | 30.5 | .50 | 12.7 | 2.50 | 63.5 |  |





| Technical Specifications (typical) |            |             |             |  |  |  |
|------------------------------------|------------|-------------|-------------|--|--|--|
| Model No.                          | 550F       | 550D        | 550G        |  |  |  |
| Frequency Band (GHz)               | 90.0–140.0 | 110.0–170.0 | 140.0–220.0 |  |  |  |
| Absolute Accuracy (%)              | 0.5        | 0.5         | 0.7         |  |  |  |
| VSWR MAX. <sup>1</sup>             | 1.20       | 1.20        | 1.20        |  |  |  |
| Insertion Loss (dB) Typical        | 0.5        | 0.6         | 0.8         |  |  |  |
| Dip at Resonance (dB)              | 0.3–1.0    | 0.3–1.0     | 0.3–1.0     |  |  |  |
| Weight (oz)                        | 3.0        | 2.5         | 2.5         |  |  |  |

## **Ordering Information**



OTHER FREQUENCY BANDS AND CUSTOM CONFIGURATIONS AVAILABLE. WR-28, 22, 15, 12 and 10